

# Freeze-Drying Equipment Market: Global Industry Trends, Share, Size, Growth, Opportunity and Forecast 2022-2027

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## Abstracts

The global freeze-drying equipment market size reached US\$ 2.0 Billion in 2021. Looking forward, IMARC Group expects the market to reach US\$ 3.1 Billion by 2027, exhibiting a growth rate (CAGR) of 7.77% during 2022-2027. Keeping in mind the uncertainties of COVID-19, we are continuously tracking and evaluating the direct as well as the indirect influence of the pandemic on different end use industries. These insights are included in the report as a major market contributor.

Freeze drying equipment is utilized to remove frozen solvents and bound water molecules from a material through sublimation and desorption processes. Unlike other dehydration equipment that uses higher temperatures, freeze-drying equipment does not cause shrinkage or toughening of the material, which helps in keeping the product appearance and characteristics intact. Consequently, the equipment is employed in the food and beverage (F&B) industry to preserve and retain the flavor and smell of perishable products. It also finds substantial applications in the pharmaceutical industry to extend the shelf life of heat-sensitive and thermolabile materials, such as proteins, microbes, tissues and plasma.

### Freeze-Drying Equipment Market Trends:

The growing inclination towards packaged food products on account of changing lifestyles, busy schedules and inflating disposable incomes represents one of the key factors impelling the market growth. Additionally, as the freeze-drying method removes water, reduces the overall weight of the food and helps in easy storage and transportation of food to military camps and spacecraft, its demand is escalating worldwide. Apart from this, the rising prevalence of diseases is increasing the application of freeze-drying equipment in the pharmaceutical industry to store

injectables and biological samples for longer periods. Furthermore, with the sudden outbreak of the coronavirus disease (COVID-19) and the urgency of testing, there is a rise in the adoption of freeze-drying equipment to meet the demand for diagnostic kits. The growing focus of researchers on developing more sophisticated processes that combine freeze drying technology with electron microscopy, biochemistry and refined surgery is anticipated to further drive the market in the coming years.

#### Key Market Segmentation:

IMARC Group provides an analysis of the key trends in each sub-segment of the global freeze-drying equipment market report, along with forecasts at the global, regional and country level from 2022-2027. Our report has categorized the market based on dryer type, scale of operation and application.

#### Breakup by Dryer Type:

- Tray Style Freeze Dryers
- Manifold Freeze Dryers
- Rotary Freeze Dryers

#### Breakup by Scale of Operation:

- Industrial Scale Freeze Dryer
- Pilot Scale Freeze Dryer
- Laboratory Scale Freeze Dryer

#### Breakup by Application:

- Food Processing and Packaging
- Pharmaceutical and Biotechnology
- Biomedical Engineering
- Others

#### Breakup by Region:

- North America
  - United States
  - Canada
- Asia-Pacific

China  
Japan  
India  
South Korea  
Australia  
Indonesia  
Others  
Europe  
Germany  
France  
United Kingdom  
Italy  
Spain  
Russia  
Others  
Latin America  
Brazil  
Mexico  
Others  
Middle East and Africa

#### Competitive Landscape:

The competitive landscape of the industry has also been examined along with the profiles of the key players being Azbil Corporation, Cuddon Freeze Dry, GEA Group Aktiengesellschaft, Harvest Right, LLC, HOF Sonderanlagenbau GmbH, Labconco Corporation, Martin Christ Gefriertrocknungsanlagen GmbH, Millrock Technology, Inc., Millrock Technology, Inc., OPTIMA packaging group GmbH, Shanghai Tofflon Science and Technology Co. Ltd., and Thermo Fisher Scientific.

#### Key Questions Answered in This Report:

How has the global freeze-drying equipment market performed so far and how will it perform in the coming years?

What has been the impact of COVID-19 on the global freeze-drying equipment market?

What are the key regional markets?

What is the breakup of the market based on the dryer type?

What is the breakup of the market based on the scale of operation?

What is the breakup of the market based on the application?

What are the various stages in the value chain of the industry?

What are the key driving factors and challenges in the industry?

What is the structure of the global freeze-drying equipment market and who are the key players?

What is the degree of competition in the industry?

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